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June 30, 2003

Richard R. Long
Director, Air and Radiation Program
EPA Region VIII
Mail Code 8P-AR
999 18th Street, #300
Denver, CO 80202

Re: Comments on EPA Dispersion Modeling Analysis of PSD Class I Increment Consumption in North Dakota and Eastern Montana (May 2003 Version)

Dear Mr. Long:

On behalf of the Lignite Energy Council (LEC), we are submitting comments relating to the above referenced EPA modeling analysis. The Lignite Energy Council's membership includes major producers of lignite, who together produce approximately 30 million tons annually; investor-owned utilities and rural electric cooperatives from a multi-state area who generate electricity from lignite, serving two million people in the Upper Midwest region; and 255 Contractor/Supplier members providing goods and services to the lignite industry.

Please note that we are not representing, nor should our comments be construed to represent, those of our members who are commenting directly or otherwise participating in these Prevention of Significant Deterioration (PSD) issues before the EPA or the State of North Dakota.

Many of the same issues that were brought to your attention in our April 29, 2002 comments (See attached) on your March 5, 2002 dispersion modeling analysis are still pertinent regarding your May 2003 analysis version. Again, let me emphasize that the LEC shares Governor John Hoeven's goals of preserving the existing lignite generation facilities and the jobs they represent as well as the state's efforts to grow the lignite industry through the Lignite Vision 21 Program. Furthermore, North Dakota has some of the best air quality in the nation, and it continues to get even better. We believe that we can grow the economy while continuing to protect air quality.

We believe EPA's May 2003 modeling version is not supportable from both legal and technical perspectives and that EPA should defer to North Dakota's administrative process since North Dakota has an EPA-approved PSD program. As a follow-up to the State Health Officer's findings and recommendations regarding public hearings the North Dakota Department of Health (NDDH) held in May of 2002, the NDDH conducted public hearings on June 12-13, 2003. The State Health Officer will again be making findings and decisions based on the additional information provided during the NDDH June 2003 hearing and public comment period regarding the administration of the PSD program.

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The LEC offers the following comments:

- 1) North Dakota's air quality in its Class I areas has improved (not deteriorated) over the last two decades:

Specifically, in 1982, 1984 and most recently in 1993, the Department of the Interior (through the National Park Service) determined that North Dakota sources have no adverse effects on air quality related values in North Dakota's Class I areas in Theodore Roosevelt National Park (TRNP). Interior's findings concluded there was no significant impact on visibility, no injury to sensitive species, no impairment of ecosystems, no impairment of the quality of visitors' experience, no diminishment of the national significance of the areas, and minimal impact on two sensitive species of lichen. Interior's 1993 certification included a finding that air quality in the areas had actually improved since 1984. Furthermore, ambient monitoring conducted by the NDDH of sulfur oxides in TRNP North and South Units show significant improvement in the North Unit since the mid-1980s and stable, near non-detectable levels in the South unit (See Exhibits 1, 2, 3 & 4 attached to our April 29, 2002 letter). Additionally, utility boiler emissions in North Dakota have been reduced from 1993 to 2000 (See Exhibit 5 attached to our April 29, 2002 letter).

- 2) EPA should fully recognize sources that receive variances so they do not consume Class I increment:

The Clean Air Act allows the permitting of sources that exceed the Class I increment if they obtain certification from the Federal Land Manager (National Park Service [NPS] in this case) that there is no adverse effect on air quality related values in the Class I areas. Since 1982, all major sources and major modifications permitted in North Dakota have obtained from the NPS such certifications, which are referred to as "variances". Until EPA Region VIII's recent letters to North Dakota, EPA has never contended that the Class I increments must be met when such a variance has been granted. EPA's recent position on variances reverses more than two decades of practice and interpretation and is directly contrary to the Clean Air Act, which exempts such variance sources from compliance with the Class I increments. As the Court in the Alabama Power case noted, such waivers of the Class I increment have "vitality and recognition in that facilities granted special consideration under these provisions are, in effect, treated as facilities operating in compliance with the provisions of the Act." (*Alabama Power Co. v. Costle*, 636 F.2d at 323,363 [D.C. Cir. 1979])

- 3) EPA should defer to North Dakota and recognize state primacy, since North Dakota has an EPA-approved PSD program:

EPA's May 2003 analysis and resulting threatened SIP call poses a fundamental challenge to North Dakota's authority to make vital decisions on economic growth and environmental protection. The Clean Air Act states that "air pollution prevention...and air pollution control at its source, are the primary responsibility of States and local governments."¹ The determination of how much deterioration is "significant" in areas that are already substantially cleaner than

¹42 U.S.C. 7401

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required by health and welfare standards is ultimately a subjective and arbitrary determination that is essentially one of land use, best made by those who are affected by it.² Congress, EPA and the courts have recognized that important discretionary PSD determinations are the primary responsibility of state and local government. As the U.S. Circuit Court of Appeals for the District of Columbia noted in the leading case on the PSD program, subject only to the minimum requirements of the federal program:

"...growth-management decisions [such as management of increment consumption] were left by Congress for resolution by the states." (Alabama Power Co. v. Costle, 636 F.2d 323,374 [D.C. Cir. 1979])

A state's exercise of its discretion on the matter of increment consumption is, at most, subject to EPA intervention only if the state has made a "clearly erroneous" legal determination, or if it is arbitrary and capricious.

4) EPA's May 2003 analysis is deficient in not incorporating recent NDDH baseline data:

EPA's May 2003 analysis does not include the most recent industry (utility and oil and gas) baseline data determined and used by the NDDH. The NDDH determined baseline emissions using the best information available and in accordance with the North Dakota Administrative Code (NDAC). Given that the state has a PSD State Implementation Plan (SIP) approved program, EPA has no legal basis for rejecting the NDDH baseline emission data.

5) EPA's May 2003 analysis is deficient in not incorporating the proper increment consuming emissions data:

EPA's May 2003 analysis did not use the recent NDDH emissions inventory data (i.e., actual emissions for each major source as the rate expressed as an annual average); but instead used 90th percentile rates. The NDAC Section 33-15-15-01.1.a. and 40 CFR 51.166(b)(21) states: "Actual emissions" means the actual rate of emissions of a contaminant from an emission unit, as determined in accordance with paragraphs 1 through 4.

(1) In general, actual emissions as of a particular date must equal the average rate, in tons per year, at which the unit actually emitted the contaminant during a two-year period which precedes the particular date and which is representative of normal source operation. The department may allow the use of a different time period upon a determination that it is more representative of normal source operation. Actual emissions must be calculated using the unit's actual operating hours, production rates, and types of materials processed, stored, or combusted during the selected period of time."

6) EPA's May 2003 analysis is deficient in that it does not take into account a baseline concentration in the Class I areas when it assesses the degree of deterioration of ambient concentrations:

In the first paragraph on Page 1 of EPA's May 2003 analysis EPA states: "To prevent significant deterioration of air quality, Congress set up the principle of only allowing a certain amount of

² 38 Fed. Reg. 18986, 18988 (July 16, 1973) & 39 Fed. Reg. 31001 (Aug. 27, 1974)

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increase in the ambient air concentration over the existing baseline concentration.” (Emphasis added.) Section 163(b)(1) of the Clean Air states, “For any Class I area, the maximum allowable increase in concentrations of sulfur dioxide and particulate matter over the baseline concentrations (emphasis added) of such pollutants shall not exceed the following amounts.” Nevertheless, EPA’s May 2003 analysis uses an approach that tracks only PSD increment consuming emissions and does not take into consideration a baseline concentration.

7) EPA’s May 2003 analysis inappropriately applies the model to the Fort Peck and Medicine Lake Wilderness Area in Montana:

EPA’s May 2003 analysis utilizes the CALPUFF model to distances (Fort Peck and Medicine Lake) greater than 200 kilometers (km) from sources in North Dakota, even through EPA’s guidance recognizes the limitations of applying the CALPUFF at distances over 200 km and that CALPUFF has been found to over-predict concentrations up to 3 to 4 times for such longer distances. EPA has been a participant in the development of the Interagency Workgroup on Air Quality Modeling (IWAQM) guidance which: “recommends use of CALPUFF for transport distances of order 200 km and less.” The Montana Class I areas are over 200 km from all of the major increment consuming sources in North Dakota. Additionally, EPA is now retroactively applying its PSD increments to a re-designated area to Class I (Fort Peck in 1984), which we believe cannot be supported legally.

Recommendation

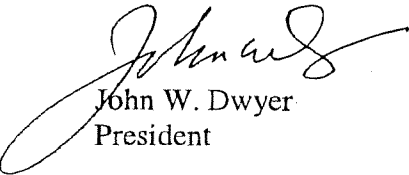
In future CALPUFF modeling analyses, EPA should use the MM5/Rapid Update Cycle Version 2 (RUC2) meteorological data system. During the June 12-13, 2003 NDDH public hearing, a number of meteorological experts provided overwhelmingly testimony that the RUC2 data set is vastly superior to the traditional 1990-1994 meteorological data set used by EPA and the NDDH. The MM5/RUC2 data set is a clear scientific improvement, using many more actual meteorological measurements from many more sources, than the data used by the EPA and the NDDH. Congress expected EPA and the states “to develop and utilize the most accurate and feasible modeling techniques available.” (*Alabama Power Company v. Costle*, 636 F.2d 323, 387, D.C. Cir. 1980.) Basin Electric Power Cooperative (BEPC) submitted year 2000 modeling analyses to the NDDH using the MM5/RUC2 data set with the CALPUFF modeling system, and in May subsequently submitted additional years 2001 and 2002 MM5/RUC2 data sets to the NDDH. BEPC has also submitted the MM5/RUC2 data sets to EPA Region VIII. This data set is now available for use in the public domain.

Summary

We appreciate the opportunity to comment on EPA’s May 2003 modeling analysis. However, EPA’s May 23 press release and its May 23 dispersion modeling analysis, if carried to its logical end, would be a preemption of North Dakota’s proper role under the federal Clean Air Act. Since North Dakota is actively working to address the PSD increment-related issues, EPA should respect and defer to the state in the manner intended by Congress. As we have described above, we contend that the EPA modeling analysis is deficient both technically and legally. EPA should defer to Congressional and judicial interpretations that give the State of North Dakota primacy in its administration of its approved PSD program.

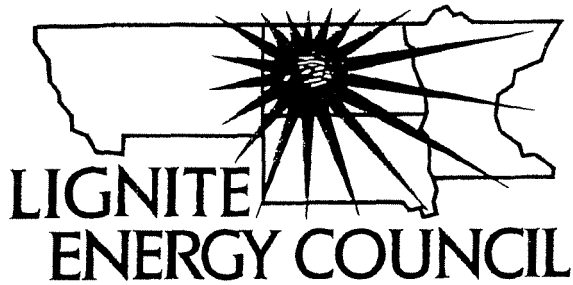
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Sincerely,



John W. Dwyer
President

cc: Board of Directors, Lignite Energy Council



JOHN W. DWYER, *President*
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April 29, 2002

Richard R. Long
Director, Air and Radiation Program
EPA Region VIII
Mail Code 8P-AR
999 18th Street, #300
Denver, CO 80202

Re: Comments on March 5th EPA Draft Dispersion Modeling Analysis

Dear Mr. Long:

On behalf of the Lignite Energy Council (LEC), we are submitting comments relating to the March 5th Draft EPA Dispersion Modeling Analysis. The Lignite Energy Council's membership includes major producers of lignite, who together produce approximately 30 million tons annually; investor-owned utilities and rural electric cooperatives from a multi-state area who generate electricity from lignite, serving two million people in the Upper Midwest region; and 240 Contractor/Supplier members providing goods and services to the lignite industry.

Please note that we are not representing, nor should our comments be construed to represent, those of our members who are commenting directly or otherwise participating in these Prevention of Significant Deterioration (PSD) issues before the EPA or the State of North Dakota.

At the outset, let me emphasize that the LEC shares Governor John Hoeven's goals of preserving the existing lignite generation facilities and the jobs they represent as well as the state's efforts to grow the lignite industry through the Lignite Vision 21 Program. Furthermore, we believe these goals can be achieved by continuing to improve North Dakota's air quality and by meeting PSD policies advanced by the State of North Dakota. We further believe EPA's March 5th approach is not supportable from both legal and technical perspectives and that EPA should defer to North Dakota's administrative process since North Dakota has an EPA-approved PSD program and will be conducting public hearings in early May and will be making its findings and decisions regarding the administration of the PSD program based on public input.

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Additional factors EPA should consider in its review of its March 5th draft report are as follows:

- 1) North Dakota's air quality in its Class I areas has improved (not deteriorated) over the last two decades:

Specifically, in 1982, 1984 and most recently in 1993, the Department of the Interior (through the National Park Service) determined that North Dakota sources have no adverse effects on air quality related values in North Dakota's Class I areas in Theodore Roosevelt National Park (TRNP). Interior's findings concluded there was no significant impact on visibility, no injury to sensitive species, no impairment of ecosystems, no impairment of the quality of visitors' experience, no diminishment of the national significance of the areas, and minimal impact on two sensitive species of lichen. Interior's 1993 certification included a finding that air quality in the areas had actually improved since 1984. Furthermore, ambient monitoring of sulfur oxides in TRNP North and South Units show significant improvement in the North Unit between 1993 and 2000 and stable, near nondetectable levels in the South unit (Exhibits 1, 2, 3 & 4). Additionally, utility boiler emissions in North Dakota have been reduced from 1993 to 2000 (Exhibit 5).

- 2) EPA should fully recognize sources that receive variances so they do not consume Class I increment:

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- 3) EPA should defer to North Dakota and recognize state primacy, since North Dakota has an EPA-approved PSD program:

EPA's March 5th Draft and resulting threatened SIP call poses a fundamental challenge to North Dakota's authority to make vital decisions on economic growth and environmental protection. The Clean Air Act states that "air pollution prevention...and air pollution control at its source, are the primary responsibility of States and local governments."¹ The determination of how much deterioration is "significant" in areas that are already substantially cleaner than required by health and welfare standards is ultimately a subjective and arbitrary determination that is essentially one of land use, best made by those who are affected by it.² Congress, EPA and the courts have recognized that important discretionary Prevention of Significant

¹42 U.S.C. 7401

²38 Fed. Reg. 18986, 18988 (July 16, 1973) & 39 Fed. Reg. 31001 (Aug. 27, 1974)

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Deterioration (PSD) determinations are the primary responsibility of state and local government. As the U.S. Circuit Court of Appeals for the District of Columbia noted in the leading case on the PSD program, subject only to the minimum requirements of the federal program:

"...growth-management decisions [such as management of increment consumption] were left by Congress for resolution by the states." (Alabama Power Co. v. Costle, 636 F.2d 323,374 [D.C. Cir. 1979])

A state's exercise of its discretion on the matter of increment consumption is, at most, subject to EPA intervention only if the state has made a "clearly erroneous" legal determination, or if it is arbitrary and capricious.

4) EPA's March 5th Draft is deficient in not incorporating recent State of North Dakota/Department of Health (DOH) baseline data:

The EPA March 5th draft does not include the most recent industry baseline data nor the DOH recommendations regarding the industry data. Industry responses to the DOH's baseline data requests of July of 2001 should be included. Similarly, the March 5th EPA draft does not include the recent DOH baseline oil and gas well emissions inventory that has been developed. Because the emissions from the oil and gas industry have decreased since the baseline period, DOH interpretations suggest a net increment expansion, which is contrary to EPA's March 5th draft, which does not include these emissions either as increment expanding or as increment consuming.

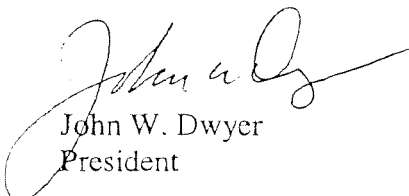
5) EPA's March 5th Draft inappropriately applies an unapproved air quality model to the Fort Peck and Medicine Lake Wilderness Area in Montana:

EPA's March 5th draft utilizes the Calpuff model which has not yet been validated or approved for PSD purposes. Additionally, the "unapproved" Calpuff model is being applied to distances (Fort Peck and Medicine Lake) greater than 200 km from sources in North Dakota, even though EPA's guidance for the Calpuff model suggests its application beyond 200 km is flawed. Additionally, EPA is now retroactively applying its PSD increments to a re-designated area to Class I (Fort Peck in 1984) which, we believe, cannot be supported legally.

Summary

In summary, we appreciate the opportunity to comment on EPA's March 5th draft. We vigorously contend that EPA's March 5th draft is technically questionable and legally deficient. Furthermore, in carrying out its responsibilities under the federal-state program, EPA should defer to Congressional and judicial interpretations that give the State of North Dakota primacy in its administration of its approved PSD program.

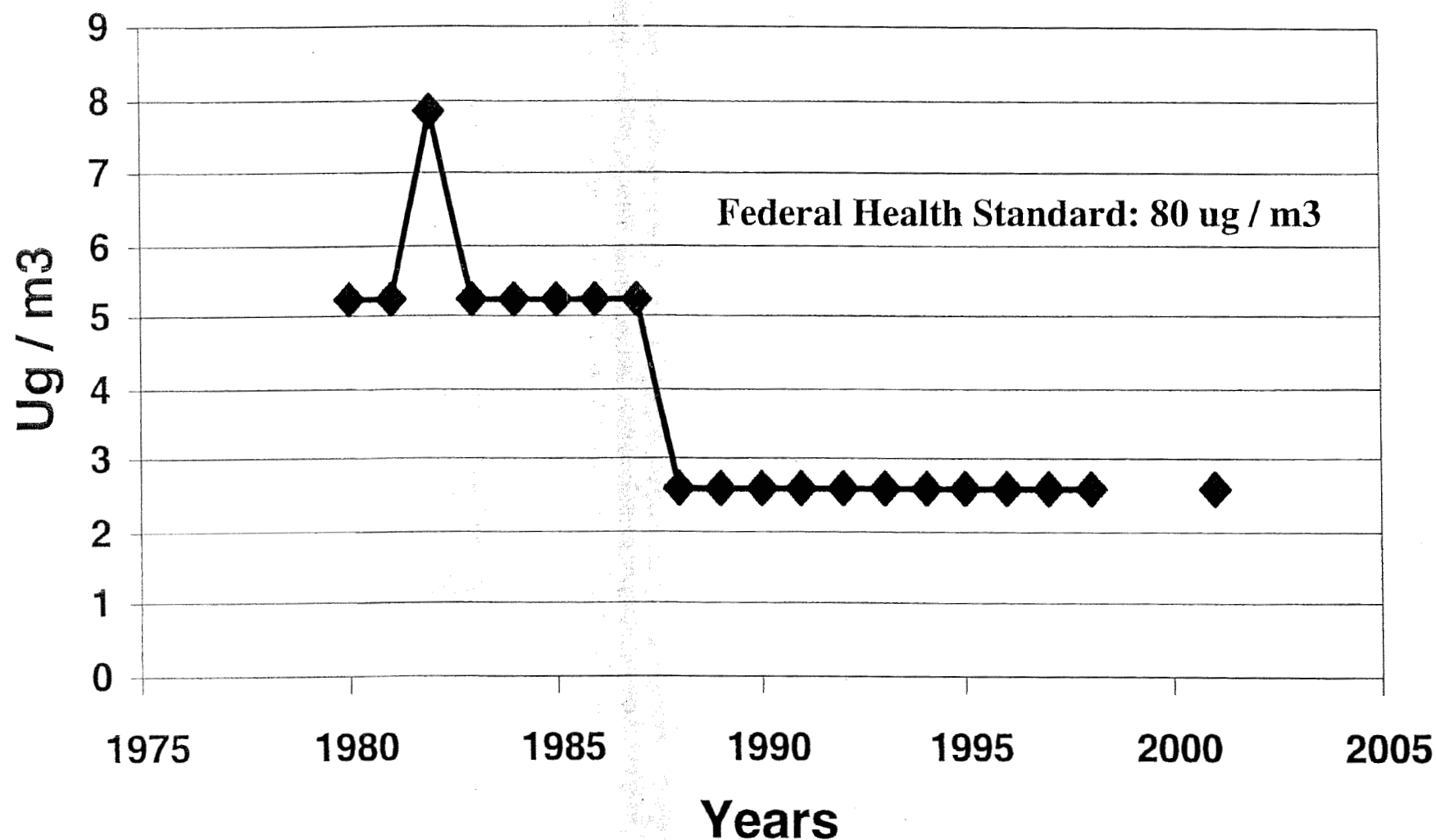
Sincerely,



John W. Dwyer
President

cc: Board of Directors, Lignite Energy Council

Theodore Roosevelt National Park North Unit Annual Sulfur Dioxide Concentration

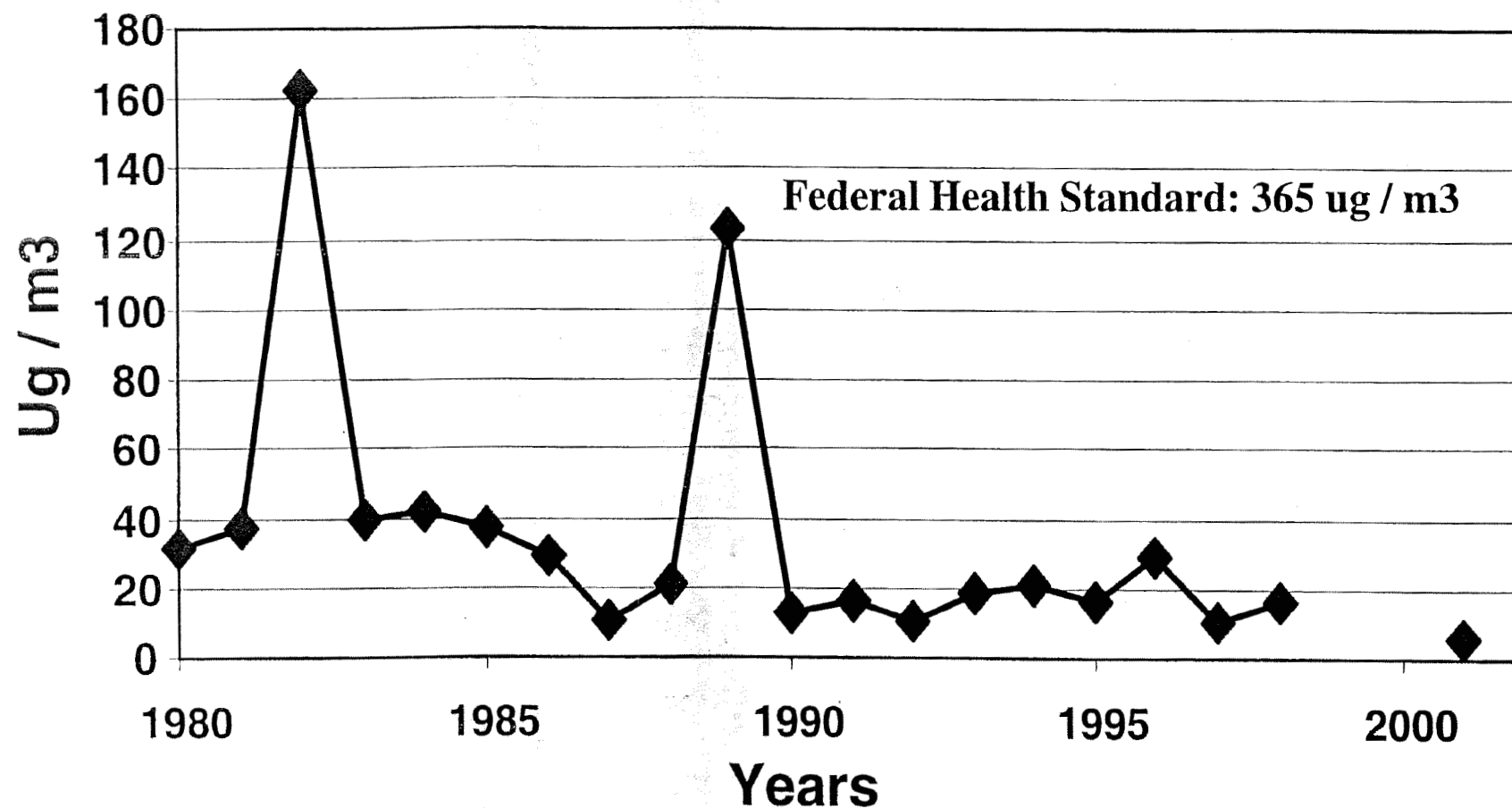


Source - ND Department of Health
DOH data not collected for years 1999-2000

4/29/02

Theodore Roosevelt National Park North Unit

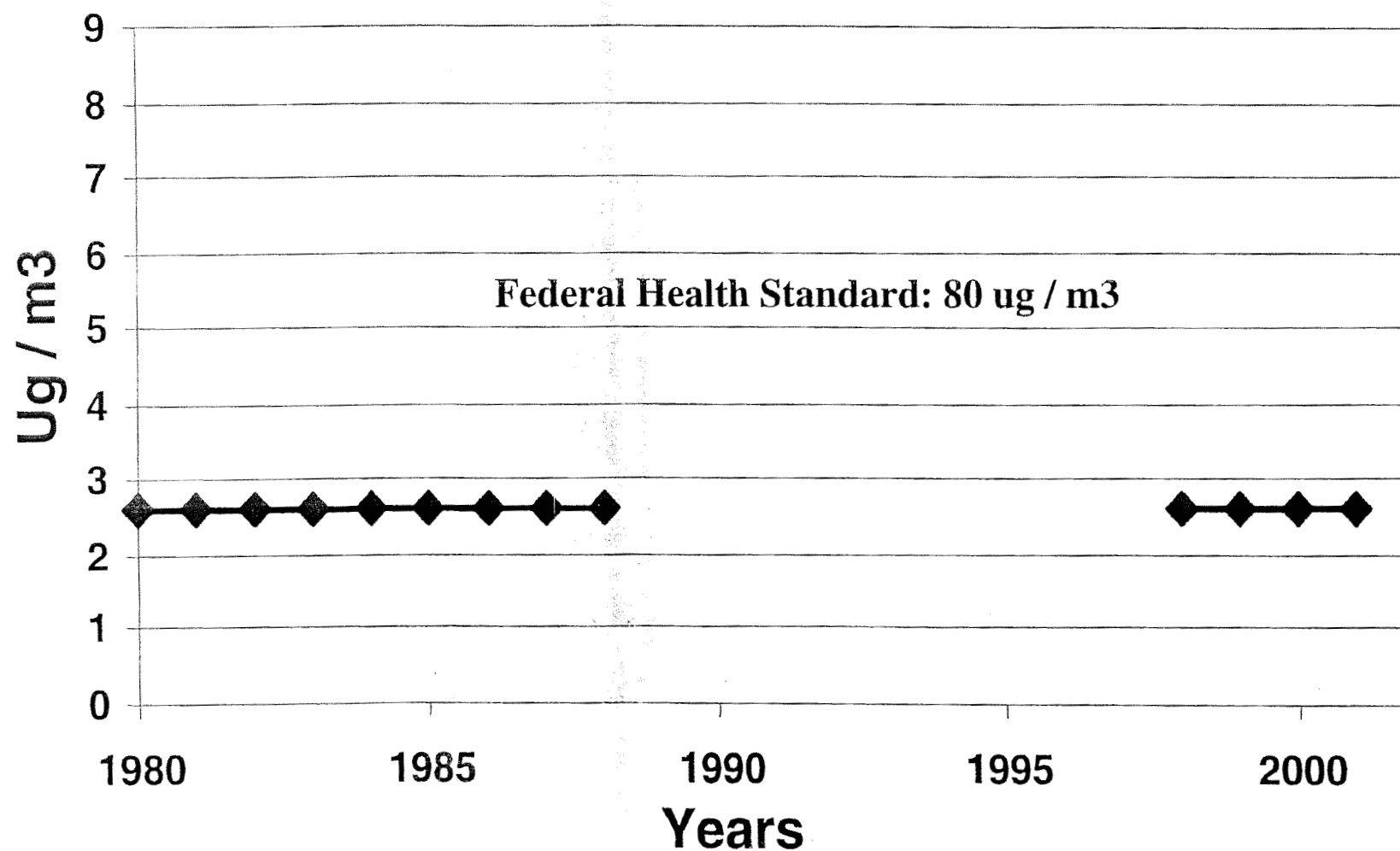
24 - Hour Sulfur Dioxide Concentration



Source - ND Department of Health
DOH data not collected for years 1999-2000

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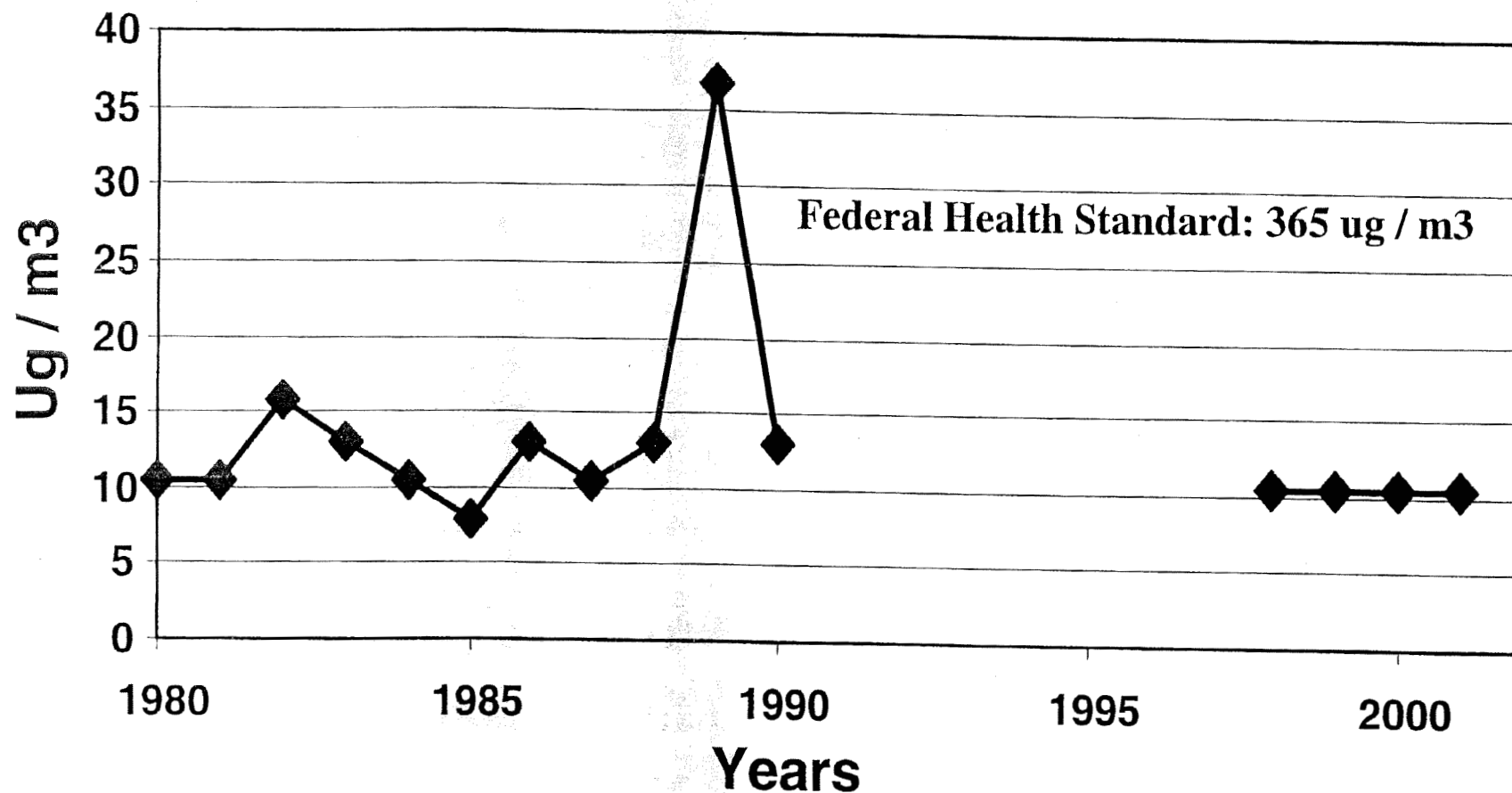
Theodore Roosevelt National Park South Unit Annual Sulfur Dioxide



Source - ND Department of Health
DOH data not collected for years 1989-1997

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Theodore Roosevelt National Park South Unit 24 - Hour Sulfur Dioxide Concentration

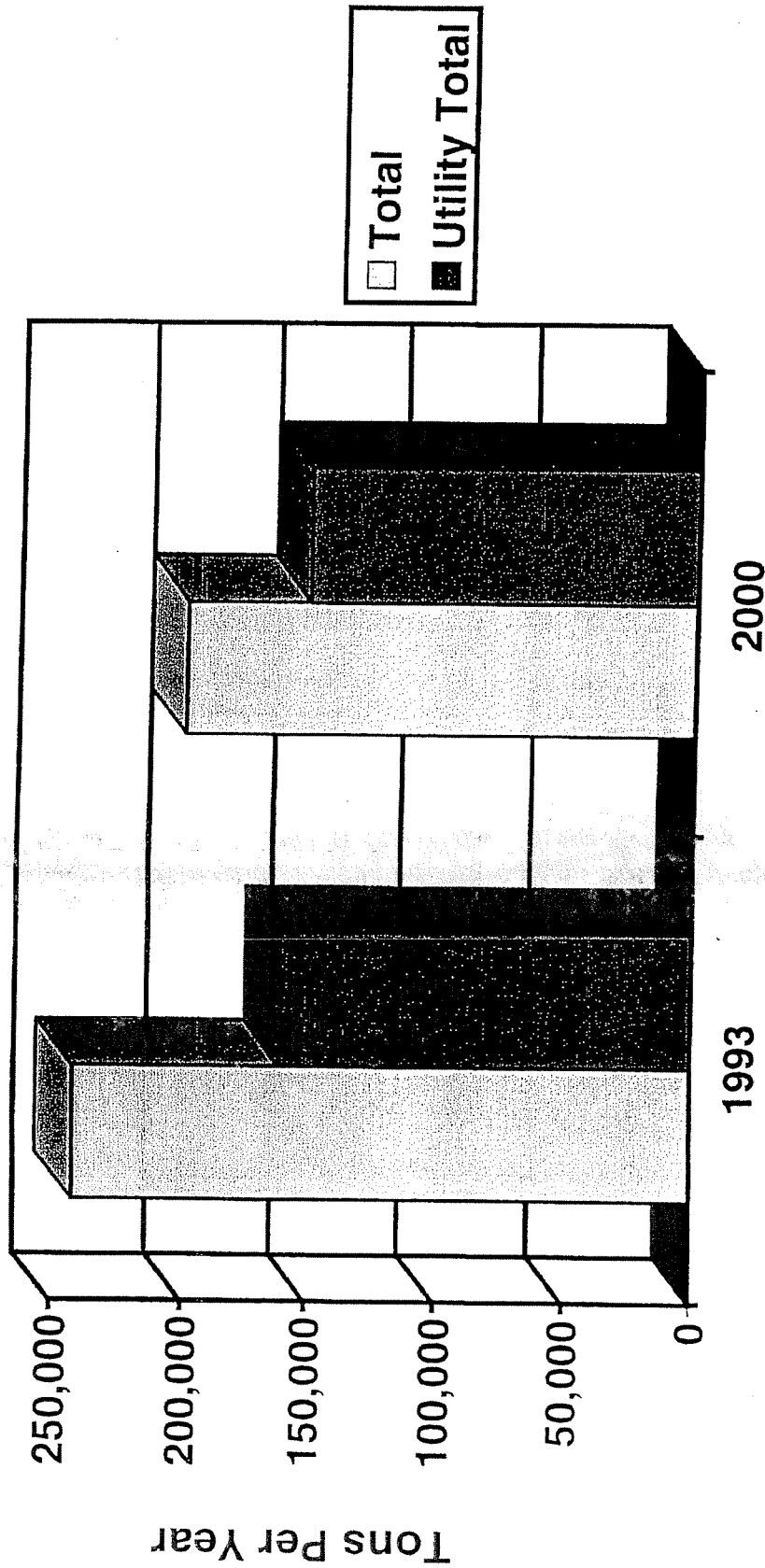


Source - ND Department of Health
DOH data not collected for years 1991-1997

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EXHIBIT 5

Trends in SO₂ Emissions in North Dakota



Source: ND Department of Health

4/29/02